



NCBI   **Protein** [Sign In] [Regis]

PubMed Nucleotide Protein Genome Structure PMC Taxonomy OMIM Books

Search  for

Display  Show  Send to

Range: from  to  Features: ☐ SNP ☐ CDD

☒ **1:** NP\_004878. Reports small inducible c...[gi:20149565]

BLink, Conserved  
Domains, Links

Comment Features Sequence

LOCUS NP\_004878 111 aa linear PRI 28-SEP-2008  
DEFINITION small inducible cytokine B14 precursor [Homo sapiens].  
ACCESSION NP\_004878  
VERSION NP\_004878.2 GI:20149565  
DBSOURCE REFSEQ: accession NM\_004887.3  
KEYWORDS .  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Primates; Haplorrhini;  
Catarrhini; Hominidae; Homo.  
REFERENCE 1 (residues 1 to 111)  
AUTHORS Oler,G., Camacho,C.P., Hojaij,F.C., Michaluart,P. Jr., Riggins,G.J.  
and Cerutti,J.M.  
TITLE Gene expression profiling of papillary thyroid carcinoma identifies  
transcripts correlated with BRAF mutational status and lymph node  
metastasis  
JOURNAL Clin. Cancer Res. 14 (15), 4735-4742 (2008)  
PUBMED 18676742  
REMARK GeneRIF: CST6, CXCL14, DHRS3, and SPPI are regulated by BRAF  
signaling and may play a role in papillary thyroid carcinoma  
pathogenesis  
REFERENCE 2 (residues 1 to 111)  
AUTHORS Wentz,M.N., Mayer,C., Gaida,M.M., Michalski,C.W., Giese,T.,  
Bergmann,F., Giese,N.A., Buchler,M.W. and Friess,H.  
TITLE CXCL14 expression and potential function in pancreatic cancer  
JOURNAL Cancer Lett. 259 (2), 209-217 (2008)  
PUBMED 18054154  
REMARK GeneRIF: CXCL14 might play a pivotal role in the pathobiology of  
pancreatic cancer, probably by regulating cancer invasion.  
REFERENCE 3 (residues 1 to 111)  
AUTHORS Peterson,F.C., Thorpe,J.A., Harder,A.G., Volkman,B.F. and  
Schwarze,S.R.  
TITLE Structural determinants involved in the regulation of CXCL14/BRAK  
expression by the 26 S proteasome  
JOURNAL J. Mol. Biol. 363 (4), 813-822 (2006)  
PUBMED 16987528  
REMARK GeneRIF: This study elucidates a post-translational mechanism for  
the loss of CXCL14 in cancer and a novel mode of chemokine  
regulation.  
REFERENCE 4 (residues 1 to 111)  
AUTHORS Ozawa,S., Kato,Y., Komori,R., Maehata,Y., Kubota,E. and Hata,R.  
TITLE BRAK/CXCL14 expression suppresses tumor growth in vivo in human  
oral carcinoma cells

JOURNAL Biochem. Biophys. Res. Commun. 348 (2), 406-412 (2006)  
PUBMED [16884687](#)  
REMARK GeneRIF: results indicate that BRAK/CXCL14 is a chemokine, having suppressive activity toward tumor progression of oral carcinoma in vivo

REFERENCE 5 (residues 1 to 111)  
AUTHORS Kato,N., Ji,G., Wang,Y., Baba,M., Hoshida,Y., Otsuka,M., Taniguchi,H., Moriyama,M., Dharel,N., Goto,T., Shao,R.X., Matsuura,T., Ishii,K., Shiina,S., Kawabe,T., Muramatsu,M. and Omata,M.  
TITLE Large-scale search of single nucleotide polymorphisms for hepatocellular carcinoma susceptibility genes in patients with hepatitis C  
JOURNAL Hepatology 42 (4), 846-853 (2005)  
PUBMED [16175604](#)  
REMARK GeneRIF: Observational study of gene-disease association. (HuGE Navigator)

REFERENCE 6 (residues 1 to 111)  
AUTHORS Kurth,I., Willimann,K., Schaerli,P., Hunziker,T., Clark-Lewis,I. and Moser,B.  
TITLE Monocyte selectivity and tissue localization suggests a role for breast and kidney-expressed chemokine (BRAK) in macrophage development  
JOURNAL J. Exp. Med. 194 (6), 855-861 (2001)  
PUBMED [11561000](#)

REFERENCE 7 (residues 1 to 111)  
AUTHORS Cao,X., Zhang,W., Wan,T., He,L., Chen,T., Yuan,Z., Ma,S., Yu,Y. and Chen,G.  
TITLE Molecular cloning and characterization of a novel CXC chemokine macrophage inflammatory protein-2 gamma chemoattractant for human neutrophils and dendritic cells  
JOURNAL J. Immunol. 165 (5), 2588-2595 (2000)  
PUBMED [10946286](#)

REFERENCE 8 (residues 1 to 111)  
AUTHORS Simpson,J.C., Wellenreuther,R., Poustka,A., Pepperkok,R. and Wiemann,S.  
TITLE Systematic subcellular localization of novel proteins identified by large-scale cDNA sequencing  
JOURNAL EMBO Rep. 1 (3), 287-292 (2000)  
PUBMED [11256614](#)

REFERENCE 9 (residues 1 to 111)  
AUTHORS Frederick,M.J., Henderson,Y., Xu,X., Deavers,M.T., Sahin,A.A., Wu,H., Lewis,D.E., El-Naggar,A.K. and Clayman,G.L.  
TITLE In vivo expression of the novel CXC chemokine BRAK in normal and cancerous human tissue  
JOURNAL Am. J. Pathol. 156 (6), 1937-1950 (2000)  
PUBMED [10854217](#)

REFERENCE 10 (residues 1 to 111)  
AUTHORS Hromas,R., Broxmeyer,H.E., Kim,C., Nakshatri,H., Christopherson,K. II, Azam,M. and Hou,Y.H.  
TITLE Cloning of BRAK, a novel divergent CXC chemokine preferentially expressed in normal versus malignant cells  
JOURNAL Biochem. Biophys. Res. Commun. 255 (3), 703-706 (1999)  
PUBMED [10049774](#)

COMMENT REVIEWED REFSEQ: This record has been curated by NCBI staff. The reference sequence was derived from [BC003513.1](#), [AF144103.1](#) and [AI743431.1](#).  
On Apr 15, 2002 this sequence version replaced [gi:4757870](#).

Summary: This gene belongs to the cytokine gene family which encode

secreted proteins involved in immunoregulatory and inflammatory processes. The protein encoded by this gene is structurally related to the CXC (Cys-X-Cys) subfamily of cytokines. Members of this subfamily are characterized by two cysteines separated by a single amino acid. This cytokine displays chemotactic activity for monocytes but not for lymphocytes, dendritic cells, neutrophils or macrophages. It has been implicated that this cytokine is involved in the homeostasis of monocyte-derived macrophages rather than in inflammation. [provided by RefSeq].

Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Entrez Gene record to access additional publications.

FEATURES                      Location/Qualifiers

    source                      1..111  
                                /organism="Homo sapiens"  
                                /db\_xref="taxon:9606"  
                                /chromosome="5"  
                                /map="5q31"

    Protein                     1..111  
                                /product="small inducible cytokine B14 precursor"  
                                /note="CXC chemokine in breast and kidney; small inducible  
                                cytokine subfamily B (Cys-X-Cys), member 14 (BRAK)"

    sig\_peptide                1..34  
                                /calculated\_mol\_wt=3677

    mat\_peptide                35..111  
                                /product="small inducible cytokine B14"  
                                /calculated\_mol\_wt=9419

    CDS                        1..111  
                                /gene="CXCL14"  
                                /coded\_by="NM\_004887.3:466..801"  
                                /db\_xref="CCDS:CCDS4188.1"  
                                /db\_xref="GeneID:9547"  
                                /db\_xref="HGNC:10640"  
                                /db\_xref="HPRD:16049"  
                                /db\_xref="MIM:604186"

## ORIGIN

1 msllprapp vsmrllaaal lllllalyta rvdgskckcs rkgpkirysd vkklemkpk  
61 phceekmvii ttksvsryrg gehclhpkqlq stkrfikwyn awnekrrvye e

//

Disclaimer | Write to the Help Desk  
NCBI | NLM | NIH

Last update: Thu, 03 Jul 2008 Rev. 132917